

The CAPITOL HILL MONITOR

FEBRUARY 1994

MSP COLLEGE PARK REOPENS!

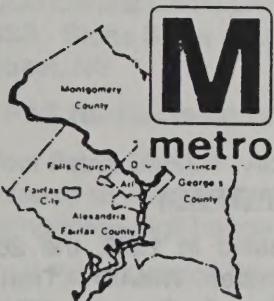
Maryland State Police officially reopened the College Park "Q" Barrack (call sign KSU469) at 10100 Rhode Island Ave. on Jan. 10 for patrol operations. The College Park facility never actually closed completely. After closing the barrack for patrol operations, MSP used the building for administrative office space.

Troopers at the College Park Barrack now operate on 39.24, one of the five MSP statewide channels, with a CTCSS of 146.2 Hz. The Security Barrack, near Woodlawn, which closed with the College Park Barrack, remains closed and could also reopen if funding permits. Many thanks to Patrick Ziliacus and Frank Carson for bringing this to our attention.

WASHINGTON AND BALTIMORE MASS TRANSIT SYSTEMS

by Alan Henney

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY (WMATA)



WMATA was created in 1967 to build a rapid-rail system for the Washington region. On Oct. 1, 1967, WMATA replaced its predecessor, the National Capital Transportation Agency, a federal entity. In early 1973, WMATA acquired the region's four private bus companies.

Today, Metrobus and Metrorail, operating within a 25-mile radius of the US Capitol, carry nearly the equivalent of the US population each year (more than 243 million riders in FY 1991).

During the past 25 years WMATA has accumulated a

diverse arsenal of radio frequencies. Let's start by looking at the general frequencies used at Metro facilities.

Metro Facilities Frequencies

44.4800 s Facilities Maintenance
44.5600 s System Maintenance
152.8700 s Rail Service (Portables)
452.0750 r
452.6750 r
462.6250 s Snow Emergencies (switching to 496 MHz)
462.7000 r Building Maintenance (600 Fifth St, NW)
463.3875 s Facilities
468.3875 s Facilities

452.075, 452.675 and 462.625 continue to be licensed, although no WMATA activity has been noted on them recently.

METROBUS

During rush hour more than 1,300 of Metro's 1,574 buses are on the streets. Some scanner listeners experience the worst bleed-over from the dreaded Metrobus antenna sites. No one knows for certain, but many speculate that the transmitters are poorly maintained. So, you may already monitor the Metrobus system whether you want to or not!

Bus radios transmit an identifying unit number, which appears on the dispatch console, each time the bus driver keys the microphone. The driver may also send an emergency signal to summon assistance by pressing a panic button. Metro is evaluating cellular phones as an alternative for two-way radios in 165 buses. If the results are successful, cellular phones will likely replace two-way radios in Metrobuses (hard to believe, isn't it?).

Metrobus Frequencies

496.4625 r F1: Telemetry
496.5875 r F2: Buses (Systemwide)
496.5125 d F3: Buses
496.5375 d F4: Buses
496.5625 d F5: Buses

496.4875 d F6: Buses
496.6125 r F7: Supervisors & Maintenance
496.4375 r F8: Supervisors (reroute dispatcher)
496.3375 d F9: Spare Channel

WMATA uses no CTCSS on the 496 MHz channels. The supervisory channels are normally repeated, while bus channels operate duplex (in this case only the dispatcher which can be monitored on the frequency listed above; add three MHz to hear the bus driver). Each bus route is assigned to a channel (3 through 6). Dispatchers can simulcast on multiple channels if desired. Metrobus personnel use a unique 10 code: 10-30 appears to be an auto accident and 10-40 sounds like a building fire (can anyone provide the entire list?).

METRORAIL

Metrorail service began on March 27, 1976, with one rail line. Today, nearly 90 trains travel on one of five lines covering 83 miles of track. By 2001, Metrorail anticipates expansion to more than 100 miles.

Metro trains run from 5:30 a.m. to midnight during the week and 8 a.m. to midnight on weekends (most Metrobuses also stop around midnight). Forest Glen is the deepest station in the Metro system at 196 feet and has only high-speed elevators connecting the station with the surface. The longest continuous escalator in the system, 230 feet long, is found at the Wheaton station.

Metrorail Frequencies

160.2600 s F1: Ops 1 Red Line (entire line)
160.3800 s F2: Ops 2 Blue Line (Arlington Cemetery to Addison Road), Orange Line (entire line)
160.6200 s F3: Ops 3 Blue Line (Va Dorn to Pentagon), Green & Yellow Lines (entire lines)
161.0250 s F4: Maintenance & Paging
161.2350 s F5: Yard 1 (Primary)
160.6050 s F6: Yard 2 (Alternate)
161.4150 s F7: Start-up Operations Control Net
161.3850 s F8: Transit Police 2
161.3850 r F9: Transit Police 1
160.7250 i Input to 161.385 (F9)

The start-up and two yard channels are commonly used alternates between maintenance or car-equipment personnel throughout the system. With the exception of the two yard and start-up channels, all other channels are, at some point, plugged into the tunnels through the Radiax, a "leaky-coaxial" antenna system. One base station is required about every mile in the tunnels to provide adequate coverage for each channel. With the exception of the input to channel 9, 160.725, which employs a CTCSS of 179.9 Hz, all other channels operate carrier squelch.

Metro, in conjunction with Bell Atlantic, is installing another leaky-coaxial antenna system to support the 800 MHz band for cellular and public safety communication.

Besides the Metrorail channels, WMATA transmits selected public safety frequencies through the tunnel's leaky-

coaxial antenna system. Public safety frequencies transmitted at various points in the tunnels include: 153.95, 154.19, 460.325, 463.175, 495.0625 and 854.2125.

Several years ago Metrorail licensed 10 channels (489.5125, 489.5375, 490.7625, 490.7875, 490.8375, 490.8625, 490.8875, 490.9125, 490.9375 and 490.9625) which were probably intended to go into operation with the new control center (still under construction).

A new fully computerized control center, four times larger than the current center, is planned for Metrorail's use by late 1995 or early 1996. The new center is expected to operate on these 10 channels, or on a proposed 800 MHz trunked system if funding permits. The 800 MHz trunked system would operate through Bell Atlantic's 800 MHz tunnel communications system.

490.9625 simulcasts the base side of 161.025, probably to create the illusion that the system is active (so WMATA doesn't lose the license). The other nine channels are currently inactive. Rumors indicate, however, that transit police CID officers presently use these 490 MHz frequencies for low-power surveillance.

WMATA Metrorail Color Codes (used by non-TPAS personnel)

Amber	Fire
Gray	Smoke
Lemon	Crowd Control
Purple	Jumper - Someone Hit with Train
Tan	Bomb Threat
White	Hostage Situation
Silver	Police Situation
Black	Collision or Derailment

Metrorail Yard Locations

Alexandria (Yellow Line)
Brentwood Road, NE (Red Line)
Greenbelt (Green Line)
New Carrollton (Orange Line)
Shady Grove (Red Line)
Silver Spring (Red Line)
West Falls Church (Orange Line)
Wheaton (Red Line)

TRANSIT POLICE & SECURITY (TPAS)



Created in 1976, the 260-member WMATA Transit Police & Security (TPAS) force patrols both the Metrorail and Metrobus systems. Radio operations are on 161.385. Metro Transit Police (MTP) officers have full-police powers on all

Metro property, including Metro stations, parking lots, tracks, rail yards, buildings, buses, bus depots and within 150 feet of any Metro bus stop. MTP officers, who are certified police officers in the District, Maryland and Virginia, are the only non-federal tri-state police officers in the nation.

In addition to sworn police officers, the TPAS force includes special police and security guards who staff fixed posts at WMATA headquarters, some rail yards and bus depots. Besides the Patrol Division, MTP has its own CID, SWAT, canine, evidence and tactical squads. The Revenue Division protects the money train and routinely operates on the start-up operations channel or on one of the two yard channels (see Metrorail section).

MTP officers undergo an extensive seven-month training program, some of which is taught at the FBI academy in Quantico. The academic training is followed by a 10-month field training program. In addition to the laws of the District, Maryland and Virginia, MTP officers also enforce county laws. MTP relies heavily on local police departments, not only for backup, but also to process arrests made by MTP officers in the Metro system. Oddly enough, MTP has yet to procure a transmitter on the 453.55 (police mutual aid) repeater.

MTP patrol officers wear brown uniforms, carry 9mm Sig Saur P226 and P228 semi-automatic handguns, OC spray and other appropriate items. Portable radios used by the officers include the Motorola Saber, Expo and older General Electric models. MTP evidence technicians, canine, and Special Response Team (SWAT) officers wear dark blue tactical uniforms. The bike squad has its own special uniform.

TPAS Frequencies

161.3850 r F1: Patrol Ops
161.3850 s F2: Talkaround
160.7250 i Input to 161.385 (F1) [179.9 CTCSS]

TPAS Facilities

CCU-Central Communications Unit
SSB - Stone Straw (mobile) Substation; 901 Franklin Street, NE

TPAS Radio Designations

Foot Patrol Division - About 20 MTP officers patrol a three to six-station beat on foot each shift and identify using three-digit badge numbers.

Foot Patrol Division Sections

Adam - 5 a.m. to 3:30 p.m. (8 a.m. to 6 p.m. on weekends)

Baker - 2:30 p.m. to 1 a.m. (2:30 p.m. to 1 a.m. on weekends)

Mobile Patrol Division - Normally 10 MTP patrol cars, which identify by shift (A, B or C) followed by the

sector number, patrol during each of the three shifts.

Mobile Patrol Division Shifts

Adam Day Shift
Baker Evening Shift
Charlie Midnight Shift

Mobile Patrol Division Sectors

- 1 Gallery Place-Chinatown to Union Station, L'Enfant Plaza to Potomac Ave. and U-Street Cardozo
- 2 Dupont Circle to Metro Center and Foggy Bottom - GWU to Smithsonian
- 3 Woodley Park-Zoo to Medical Center
- 4 Rhode Island Avenue to Wheaton and Fort Totten to Greenbelt
- 5 Stadium-Armory to New Carrollton and Fort Totten to Greenbelt
- 6 Benning Road to Addison Road and Anacostia
- 7 Pentagon to Huntington and Van Dorn Str.
- 8 Rosslyn to Ballston
- 9 East Falls Church to Vienna
- 10 Grosvenor to Shady Grove

Other mobile units patrol overlap beats or citywide.

Cruiser - MTP Supervisors

1	Chief
2-5	Deputy Chiefs
6-10	Captains
11-19	Lieutenants
20- 50	Sergeants
600-699	Revenue Division
900-999	CID

Other MTP Radio Designations (officer's badge number follows designation)

David	Detectives
King	Canine
Motor	Motorcycles
Tac	Bus Squad (plain clothes)

TPAS Ten-Signal Code

- | | |
|-------|------------------------------|
| 10- 1 | Unable to Copy |
| 10- 2 | Signal Good |
| 10- 3 | Emergency Transmissions Only |
| 10- 4 | OK |
| 10- 7 | Out of Service (E - Lunch) |
| 10- 8 | In-Service |
| 10- 9 | Repeat |
| 10-17 | Public Ordinance Violations |
| | D Drinking |
| | E Expectorate (Spit) |
| | F Food |
| | S Smoking |
| 10-20 | Location |
| 10-21 | Call by Telephone |
| 10-22 | Disregard |
| 10-23 | Arrived on Scene |

10-25	Report in Person	160.3950 s F1: Subway (Road)
10-27	Driver's License Check	161.4750 s F2: Subway (Yard)
10-28	Vehicle Tag Check	161.0850 s F3: Subway (Police)
10-29	Wanted Check (Vehicle or Person)	161.5650 s F4: Subway (Maintenance)
10-33	Emergency	160.9050 s Light Rail (Timonium-Camden Yards)
10-36	Time Check	161.0100 s Light Rail
10-50	Traffic Accident	494.3375 d F1: Buses
	PDO Property Damage Only	494.4375 d F2: Buses
	PI Personal Injury	494.6125 d F3: Buses
10-56	Intoxicated Person	494.6375 d F4: Buses
10-75	Sensitive Information	494.7625 r F5: Police
10-76	Enroute	494.8125 d F6: Automatic Vehicular Locator
10-95	Prisoner/Subject in Custody	494.9625 r F7: Supervisors & Maintenance
10-96	Mental Subject	495.0375 d F8: Automatic Vehicular Locator
10-97	Radio Check	495.1625 r F9: Police 495.5875 r New allocation (most likely F10)

TPAS Signal List

7	Suspicious Person
8	Man with a Gun
9	Person Struck by Train
13	Police Officer in Trouble
20	Train Derailment
	PDO Property Damage Only
	PI Personal Injury
44	Bomb Threat
60	Assault in Progress
85	Hostage
99	Wanted Person/Vehicle
	T Traffic
	M Misdemeanor
	F Felony

Metrorail and bus maps are available by calling 202-637-7000.

BALTIMORE'S MASS TRANSIT ADMINISTRATION

The Mass Transit Administration, a state agency, provides bus, subway and light-rail services in the Baltimore region. In addition to the subway channels, the Mass Transit Administration transmits city fire and police channels, 154.31, 453.2 and 453.3, throughout the subway tunnel's antenna system. As with WMATA, buses normally communicate in the duplex mode (non-repeated). In Baltimore a beeping sound is transmitted on the bus frequencies (494.3375, 494.4375, 494.6125 and 494.6375) to indicate to other buses that a bus driver is presently communicating with the dispatcher.

Radio codes used by the administration are loosely based on Baltimore City Police codes (can anyone provide a copy?). The administration uses 39.1 and 47.32 for coordination with MSP and SHA respectively.

MTA Frequencies

39.1000	s	MSP (F1)
47.3200	s	SHA (F1)
44.4600	s	Mobility

Radios/channels equipped with CTCSS normally use 203.5 Hz on the subway frequencies and 127.3 Hz on selected bus channels.

* * *

AMTRAK POLICE

While on the topic of transit and police, this might be an appropriate time to mention the Amtrak Police Department. Amtrak PD officers in the Washington and Baltimore area communicate over a repeater on 161.295. Amtrak police officers are fully certified

law enforcement officers under state and federal statutes and have the power to detain or arrest offenders and to enforce laws pertaining to crimes committed against Amtrak employees, passengers and property.

Amtrak police officers patrol all of the corporation's approximately 220 intercity trains on more than 24,000 miles of rail lines, serving more than 480 communities in every state but five in the continental United States!

Amtrak PD's radio system employs several CTCSS frequencies on the repeater input and output at various sites (noted below are the sites active in our area). Nearly 30 officers work out of the Washington District, while 15 work out of the Baltimore District. Their radios have at least seven channels (any additional details would be appreciated). All Washington area Amtrak officers have recently been using 192.8 Hz, because of interference experienced on 88.5 Hz.

Amtrak PD Frequencies

161.295	r	[88.5] Washington Area Stations (except Union Station)
161.295	r	[146.2] BWI (known as Channel 7)

161.295 r [192.8] Union Station
 160.365 i [88.5] Input to 161.295 [88.5]
 160.365 i [94.8] Input to 161.295 [88.5]
 160.365 i [146.2] Input to 161.295 [192.8]
 160.365 i [192.8] Input to 161.295 [192.8]

Unlike Metro Transit Police, Amtrak PD has the capability of operating on PMARS, 453.55, but is not a regular participant in the daily radio check. As an aside note, LaSalle Partners provides security guards for the Shops at Union Station using 464.525 F1, 464.575 F2, 464.775 F3, 464.825, 464.875 and 464.925.

* * *

PGPD RECEIVES 2 NEW CHANNELS

Prince George's County police-specialist Larry Vespermann reports that the FCC recently issued two new UHF-T band frequency pairs to the Prince George's County Police. Larry says the new channels, 494.4875 and 495.4625, have tentatively been designated as channels 11 and 12, respectively. The county proposes to give each sector of the Hyattsville District (sectors A and B) and the Seat Pleasant (AKA Kent) District (sectors G and H) their own channel.

PGPD will not be the sole user of either frequency: Baltimore City schools operate on 494.4875 and the District's parking enforcement personnel use 495.4625. No date has been specified as to when the new channels will go into operation. We have no guarantee at this point that either frequency pair will actual materialize. The Adam Sector, Larry adds, may be expanded south, to include the area between US 1 and the railroad tracks.

* * *

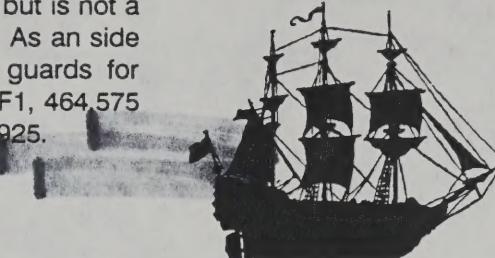
MYSTERY FREQUENCY OF THE MONTH

Baltimore area medic units on 463.2 (probably a community business repeater in Catonsville), employing a CTCSS of 167.9 Hz, consult several times each day with selected Baltimore medical facilities. This is where it gets strange: in the Silver Spring area we only receive the ambulance. Either the hospital operates independent of the 463.2 repeater system and at lower power, or responds on a different channel entirely.

167.9 Hz is a popular CTCSS used in the Baltimore area on the 10 Med channels. Could a repeater on 463.2 in the Baltimore area be receiving bleed-over from 468.175 (Med 8) via the 468.2 input? Perhaps 463.2 is linking two EMS antenna sites? If you live in the Baltimore area please monitor 463.2 and let us know what you hear.

NAVAL INVESTIGATIVE SERVICE

The Naval Investigative Service is a recent addition to the Washington area P-MARS (453.55). This has aroused some interest among scanner listeners about the NIS.



The NIS is, in essence, the detective force of the Department of the Navy. They conduct investigations involving members, employees, and property of the Naval Service (Navy and Marines), as well as conducting counter-intelligence operations. In this sense, they are similar to the USAF Office of Special

Investigations or the FBI. (The Army, DoD's premier law enforcement element, does not mix intelligence and criminal investigations - criminal investigations are conducted by the Criminal Investigation Command and counter-intelligence is in the purview of the Intelligence Command). All three (Army, Navy & Air Force) are organized, world-wide, on a regional basis.

The NIS headquarters and the regional headquarters for this area are located at the Washington Navy Yard in DC. The region has field offices at the Navy Yard, Bethesda Medical Center, the Naval Academy (Annapolis), Patuxent River Naval Air Station, and Quantico Marine Corps Base. As an aside, the NIS headquarters is responsible for providing the personal security for the Secretary of the Navy, Chief of Naval Operations, Commandant of the Marine Corps, and others that are designated by competent authority.

Operations primarily are conducted on three simplex frequencies - 140.775; 140.65; and 140.075. These three frequencies are fairly standard throughout the US. In our region the headquarters, which identifies as "OPSCON-CENTER", conducts daily radio checks, usually on 140.775. However, each of the field offices operates on its own CTCSS tone. The OPSCONCENTER operates on all of the CTCSS tones. Washington and Bethesda use 141.3; Annapolis uses 127.3; Patuxent River NAS uses 192.8; and Quantico MCB uses 173.8. In the same context, and for those readers "down-range", Norfolk uses 127.3.

* * *

US POSTAL SERVICE, BALTIMORE

The Postal Security Force in Baltimore (and possibly postal inspectors as well) have been noted using 414.975 with a CTCSS of 82.5. If anyone can provide additional information, it would be greatly appreciated. (FYI, the Postal Security Force in Washington uses 418.3, CSQ).

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Please address all correspondence to Alan. We encourage readers to submit material and to write articles which relate to the hobby. All submissions are subject to editing for both style and content. When submitting material please make certain we have your phone number should we have any questions. We welcome frequency and visitor requests, but please include a SASE.

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The Capitol Hill Monitor is the non-profit monthly newsletter of the Capitol Hill Monitors. The newsletter keeps scanner enthusiasts abreast of local meetings, frequency profiles and other topics of interest. Dues (which includes 12 issues) are \$8. Kindly make checks payable to Alan Henney. Membership will be prorated accordingly in the event of a postage increase.

Meeting Coordinators:

Mike Peyton, Maryland Coordinator (703-902-6241)
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Capitol Hill Monitor's Scanner/Shortwave Net:

Listen for the CHM net, hosted by Ken Fowler, at 7:30 p.m. on the first and third Monday of each month on 146.91 MHz.

Frequency Forum Computer Bulletin Board:

We encourage computer users to log onto Jack Anderson's Frequency Forum computer BBS at 703-207-9622 (8-N-1). Frequency Forum is the official electronic gathering place for readers of the Capitol Hill Monitor.